

Custodial, Labor and Trades Branch
Maintenance and Plant Operation Group
Water Series

E.P.W.U. WASTEWATER PLANT TECHNICIAN II

4/99 (SAC)

Summary

Under general supervision, supervise activities of a crew engaged in operation and/or maintenance of a wastewater treatment plant.

Typical Duties

Oversee shift operations and direct lower level staff in controlling routine wastewater treatment processes and coordinating wastewater pumping and disposal operations in compliance with state and federal permits. Involves: monitoring operations through successive stages of wastewater treatment systems; taking appropriate corrective action to assure proper operation of pumps, motors, air compressors, thickeners, blowers, valves, gates or other equipment; inspecting and adjusting digester levels and temperature, feed rate and gas quality and production; maintaining water-well and sludge pond levels within prescribed limits; monitoring laboratory tests of effluent prior to injection or release and assuring samples are taken and tested in accordance with federal and state regulations; making adjustments to chemical additives according to established guidelines.

Coordinate and perform installation, maintenance and repair of treatment systems and complex equipment. Involves: assisting in planning and directing repair of blowers, aeration systems, clarifiers, digestion equipment, mixers or similar mechanical equipment; inspecting machinery for proper operation and to detect faulty parts; replacing bearings, sleeves, packing glands, oil columns, pumps, housings, shafts, spider bearings, pump bowls, or similar parts using hand tools; checking electrical equipment for shorts, faulty wiring, loose connections, loss of power and overload; performing minor electrical or mechanical repairs including basic welding; cleaning and flushing sludge lines, washing or replacing filters; scheduling and performing required preventive maintenance; installing fire sprinkler systems and meters.

Perform other duties as assigned. Involves: substituting for supervisor during temporary absences by carrying out specifically delegated duties sufficient to sustain continuity of ordinary operations or services, and similarly substituting for coworkers; preparing and maintaining daily and monthly equipment and process logs, power records, chemical and gas consumption and other related records and reports using computers; maintaining inventory and requisitioning supplies.

Minimum Qualifications

Training and Experience: Graduation from high school or G.E.D. and five (5) years experience in water or wastewater treatment plant operations or maintaining and repairing mechanical equipment, which includes three (3) years at a level comparable to Plant Technician I in a wastewater treatment plant; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Considerable knowledge of: principles practices and procedures used in operation, maintenance and repair of a wastewater treatment plant; safe work practices and procedures. Good knowledge of: operation and maintenance of a variety of wastewater treatment equipment including nitrification reactors, chemical flocculation chambers, flash mix tanks, oxidation chambers, clarifiers, sludge thickeners, ion exchangers; wastewater treatment chemicals and compounds wastewater treatment processes, including those used in tertiary processes; Federal, State and local rules and regulations governing wastewater plant processes and effluent quality. Some knowledge of supervisory practices and procedures.

Ability to: plan, layout and complete installation, modification and repairs of wastewater treatment plant equipment; read and interpret technical manuals, blueprints and other documents used to install, adjust and set various meters, gauges, and similar devices; read and record data from gauges, graphs, dials and other measuring instruments; calculate chemical formulas and estimates of required labor and materials cost; plan, assign, supervise, train, review and evaluate the work of assigned personnel; enforce personnel rules and regulations, standards of conduct and work attendance; express oneself clearly and concisely, both orally and in writing; establish and maintain effective working relationships with fellow employees; enforce and comply with safe working

practices and procedures; maintain records and prepare reports.

Skill in the safe use and care of: common hand tools and instruments to sample and measure water quality.

Physical Requirements: Occasional lifting and carrying of moderately heavy objects (up to 50 pounds); exposure to chemicals, effluent or similar solutions; operating a motor vehicle through City traffic and working under all weather conditions.

Special Requirements: Work a rotating shift schedule including weekends and holidays.

License and Certificates: Texas Class "C" Driver's License; Texas "B" Wastewater Certificate of Competency by time of appointment.

Director of Personnel

Department Head

OFFICIAL